Amendments to the Claims

This listing of claims will replace all prior listings of claims in the application.

Listing of Claims

1

1. (Currently Amended) A copper electrolytic solution containing as an additive a compound having a specific skeleton represented by General Formula formula (1) below, which is obtained by an addition reaction in which water is added to a compound having in a molecule at least one epoxy group:

[Chemical Formula 1]

$$\left(\begin{array}{cc}
CH_2 - CH \\
OH & OH
\end{array}\right)_n A \tag{1}$$

wherein A is an epoxy compound residue and n is an integer 1 or more.

- 2. (Original) The copper electrolytic solution according to Claim 1, wherein the epoxy compound residue A of said compound having the specific skeleton has a linear ether bond.
- 3. (Currently Amended) The copper electrolytic solution according to Claim 1, wherein said compound having a specific skeleton includes any of compounds represented by chemical-formulae (2) through (9) below:

[Chemical Formula 2]

[Chemical Formula 3]

$$\begin{array}{c}
OH \\
CH_2-O-CH_2-CH-CH_2-OH \\
CH-OH \\
CH_2-O-CH_2-CH-CH_2-OH \\
OH
\end{array}$$
(3)

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[Chemical Formula 4]

$$\begin{array}{c}
OH \\
CH_2-O-CH_2-CH-CH_2-OH \\
CH-O-CH_2-CH-CH_2-OH \\
OH \\
CH_2-O-CH_2-CH-CH_2-OH \\
OH
\end{array}$$
(4)

[Chemical Formula 5]

wherein n is an integer of 1 to 5.5;

[Chemical Formula 6]

$$\begin{array}{c}
OH \\
CH_2-O-CH_2-CH-CH_2-OH \\
CH_3-CH_2-C-CH_2-OH \\
CH_2-O-CH_2-CH-CH_2-OH \\
OH
\end{array}$$
(6)

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{Chemical Formula 7}

$$\begin{array}{c}
OH \\
CH_{2}-O-CH_{2}-CH-CH_{2}-OH \\
CH_{3}-CH_{2}-C-CH_{2}-O-CH_{2}-CH-CH_{2}-OH \\
OH \\
CH_{2}-O-CH_{2}-CH-CH_{2}-OH \\
OH
\end{array}$$
(7)

[Chemical Formula 8]

wherein n is an integer of 1 to $\frac{22}{22}$; and

{Chemical Formula 9}

wherein n is an integer of 1 to 3.

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- 4. (Previously Presented) A copper electrolytic solution according to Claim 1, wherein said copper electrolytic solution contains an organic sulfur compound.
- 5. (Currently Amended) The copper electrolytic solution according to Claim 4, wherein said organic sulfur compound is a compound represented by General Formula formula (10) or (11) below:

$$X-R^{1}-(S)_{n}-R^{2}-Y$$
 (10)

$$R^4 - S - R^3 - SO_3Z$$
 (11)

wherein in formulae (10) and (11), R^1 , R^2 and R^3 are alkylene groups with 1 through 8 carbon atoms, R^4 is selected from the group consisting of hydrogen—and,

{Chemical Formula 10}

$$\begin{array}{c|c} & & & & S \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ &$$

$$H_3C-CH_2-O-\overset{S}{C}-$$
 and HN
 $C-\overset{H}{V}$

X is selected from the group consisting of hydrogen, a sulfonic acid group, a phosphonic acid group, group and an alkali metal salt group or ammonium salt group of sulfonic acid or phosphonic acid, Y is selected from the group consisting of a sulfonic acid group, a phosphonic acid group, group and an alkali metal salt group of sulfonic acid or phosphonic acid, Z indicates hydrogen or an alkali metal, and n is 2 or 3.

6.-9. (Canceled)